516,643

n.-x

(54) Title: METHOD FOR WRITING DATA TO A NON-VOLATILE MEMORY EMBEDDED IN AN INTEGRATED CIRCUIT AND CORRESPONDING CIRCUIT

a

b
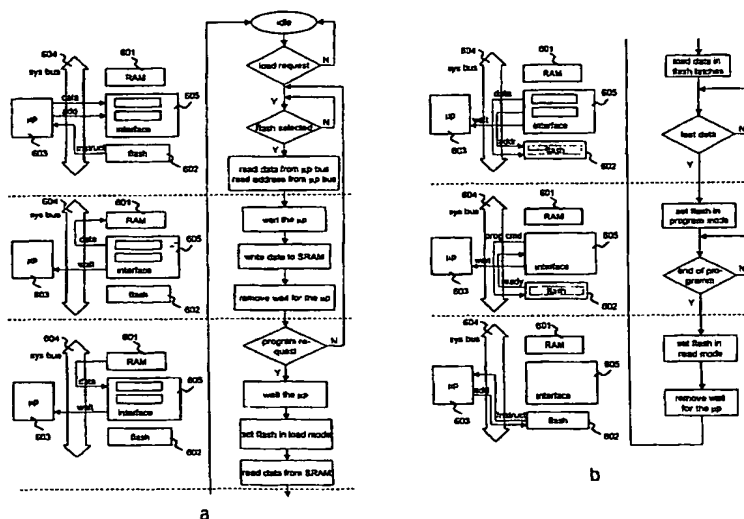
(57) Abstract: The invention is a method and a circuit for writing data (DATA) from a processor (603) to a non-volatile memory (602) embedded in an integrated circuit. The main objective is to optimize the use of this embedded non-volatile memory. The method comprises a number of steps: The data to be written to the non-volatile memory (602) is first transferred to a volatile memory (601). Thereafter, a wait signal (wait) will be send to the processor (603). Then, the data (DATA) will be transferred from the volatile memory (601) to the non-volatile memory (602). At last, the wait signal (wait) will be removed. Thus the non-volatile memory (602) can be used both as instruction memory and as RAM, which achieves the main goal of this invention. The corresponding circuitry is a complex integrated circuit equipped to execute the above functions.

WO 03/104976 A2